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| COWAN LIEBOWITZ & LATMAN P.C. | | | | |
| JOHN J TORRENTE | | | | |
| 1133 AVE OF THE AMERICAS | | | | |
| NEW YORK, NY 10036 | | | | |
| EXAMINER | | | | |
| NGUYEN, ALLEN H | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/766,677

Applicant(s)

NISHIKAWA, NAOYUKI

Examiner

ALLEN H. NGUYEN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-9 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 01/24/2008 have been fully considered but they are not persuasive.
2. With respect to applicant's argument that "In the Nakatsuma (US 6,115,132), et al. patent, the server does not receive print data nor does it transmit print data to a remote printer".

In reply: Nakatsuma '132 does not explicitly show print response means for receiving print data from the client computer and generating a print job for performing a response process when the data is printed.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Hull '086. In particular, Hull '086 teaches print response means (i.e., print spooling software for writing to printer 112; see col. 6, line 34) for receiving print data from the client computer and generating a print job for performing a response process when the data is printed (i.e., Client system 102 sends the document to be printed to print server 104 which runs print spooling software for writing to printer 112. The print spooling software maintains a queue of print jobs to run. The document may be sent to print server 104 in any format, such as text, TIFF, GIF, postscript, etc. Printer 112 will typically accept postscript input but other printer configurations are also possible. If the format of transmission by client system 102 is different from the format accepted by

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printer 112, printer server 104 will also perform format conversion; see col. 6, lines 32-41, fig. 1).

In view of the above, having the system of Nakatsuma and then given the well-established teaching of Hull, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Nakatsuma as taught by Hull to include: print response means for receiving print data from the client computer and generating a print job for performing a response process when the data is printed, since such a modification would ensure a specialized print server is used. This server is generally a high-performance general purpose computer to which print jobs are directed by the network. Specialized software on the server allows print jobs or copies thereof to be distributed among multiple printers that are managed by the server.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatsuma et al. (US 6,115,132) in view of Hull et al. (US 6,665,086).

Regarding claim 1, Nakatsuma '132 discloses a remote printing server which receives data from a client computer (i.e., for transmitting job information of print data to a server; see col. 22, line 48) and sends data over a network so as to print the data on a remote printer (105, fig. 1), comprising:

spooling means (Windows spooler 707, fig. 8) for generating a print completion job by spooling print job generated by said print response means (i.e., GDI notifies the Windows spooler 707 and virtual print server print monitor 708 of the print start; see col. 12, lines 2-4);

transferring data conversion means for converting the print completion job generated by said spooling means into a format in which the job can be transferred to the remote printer over the network (i.e., the network printer control monitor 709 transfers print data to network printer in accordance with a print communication protocol to print. Inherently, data pass on to the network are in the form of electric signal. Therefore the print data must be converted into electric signal before it can be transmitted);

remote transfer means (The network printer control monitor 709, fig. 7) for transferring the print completion job converted into a transferrable format by said transferring data conversion means using a predetermined transfer protocol (i.e., the network printer control monitor 709 passes the print data to the network printer in

accordance with a print communications protocol to print it at the network printer 701; see col. 12, lines 39-41, fig. 7).

It is noted that Nakatsuma '132 does not explicitly show print response means for receiving print data from the client computer and generating a print job for performing a response process when the data is printed.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Hull '086. In particular, Hull '086 teaches print response means (i.e., print spooling software for writing to printer 112; see col. 6, line 34) for receiving print data from the client computer and generating a print job for performing a response process when the data is printed (i.e., Client system 102 sends the document to be printed to print server 104 which runs print spooling software for writing to printer 112. The print spooling software maintains a queue of print jobs to run. The document may be sent to print server 104 in any format, such as text, TIFF, GIF, postscript, etc. Printer 112 will typically accept postscript input but other printer configurations are also possible. If the format of transmission by client system 102 is different from the format accepted by printer 112, printer server 104 will also perform format conversion; see col. 6, lines 32-41, fig. 1).

In view of the above, having the system of Nakatsuma and then given the well-established teaching of Hull, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Nakatsuma as taught by Hull to include: print response means for receiving print data from the client computer and generating a print job for performing a response process when the data is

printed, since such a modification would ensure a specialized print server is used. This server is generally a high-performance general purpose computer to which print jobs are directed by the network. Specialized software on the server allows print jobs or copies thereof to be distributed among multiple printers that are managed by the server.

Regarding claim 3, Nakatsuma '132 discloses the remote priming server (101, fig. 1), further comprising:

selection means (a setting display 207, figs. 2, 25-32) for selecting a transfer protocol for remote transfer of the data (i.e., the client PC 102 transfers print data of the job to the network printer 105. This data transfer may be performed in accordance with a protocol dedicated to printing, such as LPR or TCP/IP; see col. 23, lines 35-40).

Regarding claim 6, Nakatsuma '132 discloses the remote printing server (101, fig. 1), further comprising:

transfer control means (the virtual print server service (Server) 712, fig. 11) for controlling a transfer parameter setting file and said remote transfer means by referring to the transfer parameter setting file (i.e., the virtual print server service (client) 712 checks at Step S3603 the parameter representative of the printer name contained in the VPSOpenPrinter command received at Step S3601; see col. 10, lines 59-67, fig. 36).

Regarding claim 7, Nakatsuma '132 discloses a remote print system (Ethernet, fig. 1), comprising:

the remote printing server (Server 101, fig. 1) and the remote printer (Network Printer 105, fig. 1).

Regarding claim 8, claim 8 is the method claim of device claim 1. Therefore, method claim 8 is rejected for the reason given in device claim 1.

Regarding claim 9, Nakatsuma '132 discloses a computer-readable storage medium storing a program (Program 300/400, figs. 3-4) used to direct a computer to use as a remote printing server (Server 101, fig. 1) for receiving data from a client computer and for sending data over a network (i.e., for transmitting job information of print data to a server; see col. 22, line 48) so as to print the data on a remote printer (Network Printer 105, fig. 1), comprising:

a spooling step of generating a print completion job by spooling print job generated in said print response step (i.e., GDI notifies the Windows spooler 707 and virtual print server print monitor 708 of the print start; see col. 12, lines 2-4);

a transferring data conversion step of converting the print completion job generated in said spooling step into a format in which the job can be transferred to the remote printer over the network (i.e., the network printer control monitor 709 transfers print data to network printer in accordance with a print communication protocol to print. Inherently, data pass on to the network are in the form of electric signal. Therefore the print data must be converted into electric signal before it can be transmitted);

a remote transfer step of transferring the print completion job converted into a

transferrable format in said transferring data conversion step using a predetermined transfer protocol (i.e., the network printer control monitor 709 passes the print data to the network printer in accordance with a print communications protocol to print it at the network printer 701; see col. 12, lines 39-41, fig. 7).

It is noted that Nakatsuma '132 does not explicitly show a print response step of receiving print data from the client computer and generating a print job for performing a response process when the data is printed.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Hull '086. In particular, Hull '086 teaches a print response step (i.e., print spooling software for writing to printer 112; see col. 6, line 34) of receiving print data from the client computer and generating a print job for performing a response process when the data is printed (i.e., Client system 102 sends the document to be printed to print server 104 which runs print spooling software for writing to printer 112. The print spooling software maintains a queue of print jobs to run. The document may be sent to print server 104 in any format, such as text, TIFF, GIF, postscript, etc. Printer 112 will typically accept postscript input but other printer configurations are also possible. If the format of transmission by client system 102 is different from the format accepted by printer 112, printer server 104 will also perform format conversion; see col. 6, lines 32-41, fig. 1).

In view of the above, having the system of Nakatsuma and then given the well-established teaching of Hull, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Nakatsuma as

taught by Hull to include: a print response step of receiving print data from the client computer and generating a print job for performing a response process when the data is printed, since such a modification would ensure a specialized print server is used. This server is generally a high-performance general purpose computer to which print jobs are directed by the network. Specialized software on the server allows print jobs or copies thereof to be distributed among multiple printers that are managed by the server.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatsuma et al. (US 6,115,132) in view of Hull et al. (US 6,665,086), and further in view of Ferlitsch (US 2002/0089692).

Regarding claim 2, the combination of Nakatsuma '132 and Hull '086 does not disclose the remote printing server, further comprising: recovery means for performing a recovery process on the print completion job transferred by said remote transfer means as necessary.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Ferlitsch '692. In particular, Ferlitsch '692 teaches the remote printing server (Print Server 526, fig. 8), further comprising: recovery means (a status detecting print system component (SDPC) 520, fig. 8, paragraph [0086]) for performing a recovery process on the print completion job transferred by said remote transfer means as necessary (i.e., systems and methods for detecting the status of printing devices and recovering from printing errors; see Abstract).

In view of the above, having the system of Nakatsuma and Hull and then given the well-established teaching of Ferlitsch, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Nakatsuma and Hull as taught by Ferlitsch to include: the remote printing server, further comprising: recovery means for performing a recovery process on the print completion job transferred by said remote transfer means as necessary, since Ferlitsch '692 stated on page 1, paragraph [0003] that such a modification would making the cost of the network very manageable.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatsuma et al. (US 6,115,132) in view of Hull et al. (US 6,665,086), and further in view of Qiao (US 2003/0030843).

Regarding claim 4, the combination of Nakatsuma '132 and Hull '086 does not explicitly show the remote priming server, wherein said remote transfer means uses a file transfer protocol or a mail distribution protocol.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Qiao '843. In particular, Qiao '843 teaches the remote priming server (ExPM server 12, fig. 16), wherein said remote transfer means uses a file transfer protocol (Converts the job sent from the ExPM client 2-1 by IPP into the protocol such as HTTP/FTP and transfers it to the ExPM server 31, see page 9, paragraph [0241]) or a mail distribution protocol (i.e., the ExPM client 2-1 sends the printing command mail to

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the target printer using Simple Mail Transfer Protocol SMTP; see page 4, paragraph [0100]).

In view of the above, having the system of Nakatsuma and Hull and then given the well-established teaching of Qiao, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Nakatsuma and Hull as taught by Qiao to include: the remote priming server, wherein said remote transfer means uses a file transfer protocol or a mail distribution protocol, since Qiao '843 stated on page 1, paragraph [0019] that such a modification would ensure a step of converting the printing service request of the client using the Internet Printing Protocol to a protocol which allows circumventing the firewall of the print server, and transferring the request to the print server according to the access.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatsuma et al. (US 6,115,132) in view of Hull et al. (US 6,665,086), and further in view of Ogishima (US 2002/0083001).

Regarding claim 5, the combination of Nakatsuma '132 and Hull '086 does not explicitly show the remote printing server, further comprising: encipher means for enciphering the print completion job transferred by said remote transfer means.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Ogishima '001. In particular, Ogishima '001 teaches the remote printing server (12, fig. 3), further comprising: encipher means for enciphering the print

completion job transferred by said remote transfer means (i.e., a transmitting step enciphering requested data in the server and transmitting enciphered data via a network, a deciphering step receiving and deciphering the enciphered data in an apparatus which at least has a printing function; see page 2, paragraph [0019], fig. 3).

In view of the above, having the system of Nakatsuma and Hull and then given the well-established teaching of Ogishima, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Nakatsuma and Hull as taught by Ogishima to include: The remote printing server, further comprising: encipher means for enciphering the print completion job transferred by said remote transfer means, since Ogishima stated on page 1, paragraph [0007] that such a modification would ensure various enciphering systems have been proposed to prevent copying of the digital data, by enciphering the digital data before transmission at the transmitting end and deciphering the enciphered digital data at the receiving end.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Biundo (US 2004/0137919) discloses short message service (SMS) message e-mail configuration message.

Dittrich et al. (US 2004/0141189) discloses method and apparatus for simulating 2 bit-per-pel printing on a bi-level printer using intelligent double dotting.

Dittrich et al. (US 7,170,639) discloses halftone method and apparatus that provides simultaneous, multiple lines per inch screens.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALLEN H. NGUYEN whose telephone number is (571)270-1229. The examiner can normally be reached on M-F from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571)-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

/A. H. N./
Examiner, Art Unit 2625
03/28/2008